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**NOTES ON SOME CERAMBYCIDAE (COLEOPTERA)
FROM IRAN WITH DESCRIPTION OF TWO NEW SPECIES**
(Insecta Coleoptera Cerambycidae)

Riassunto

[*Note su alcuni Cerambycidae (Coleoptera) dell'Iran, con descrizione di due nuove specie.*] Gli autori descrivono *Apatophysis farsicola* nuova specie, facilmente distinguibile da *A. modica*, con cui convive, per le antenne molto più corte, più robuste e con differenti rapporti di lunghezza fra i singoli segmenti, i tarsi corti e robusti con i lobi dell'ultimo segmento non spinoso all'apice, i lobi oculari più piccoli, ecc. Descrivono inoltre *Trichoferus fissitarsis* nuova specie dell'Iran sud occidentale e dell'Iraq meridionale, molto simile a *T. preissi* Heyden, 1894, da cui si distingue in maniera sostanziale, per la parte inferiore dei tarsi munita di un largo solco longitudinale mediano. Segnalano inoltre località di raccolta di alcune specie di Cerambycidae, tre delle quali nuove per la fauna dell'Iran: *Trichoferus campestris* (Faldermann, 1835), *T. fasciculatus* (Faldermann, 1837) e *Chlorophorus nivipictus* (Kraatz, 1879).

Abstract

Apatophysis farsicola new species from Iran and *Trichoferus fissitarsis*, new species from Iran and Iraq are described in this paper. Collecting data are provided for several Cerambycidae; three of them, *Trichoferus campestris* (Faldermann, 1835), *T. fasciculatus* (Faldermann, 1837) and *Chlorophorus nivipictus* (Kraatz, 1879) are recorded for the first time from Iran.

Key words: Cerambycidae, *Apatophysis*, *Trichoferus*, *Chlorophorus*, new species, Iran, Iraq.

This note is intended to give a report on a collection of 26 species of Cerambycidae, collected in a few localities of the province of Fars in southwestern Iran and belonging to the Department of Plant Protection, Islamic Azad University, Jahrom (Fars province, Iran). Two of them, *Apatophysis farsicola* and *Trichoferus fissitarsis*, are regarded as new to the Science and described herein. We have included collecting data relating some species present in the collections P. Rapuzzi (CPR), G. Sama (GS), Museum G. Frey, now deposited at the

Naturhistorisches Museum Basel (NHMB) and Muséum d'Histoire Naturelle, Genève (Switzerland) (MHNG). Three species, *Trichoferus campestris* (Faldermann, 1835), *T. fasciculatus* (Faldermann, 1837) and *Chlorophorus nivipictus* (Kraatz, 1879) are recorded from Iran for the first time.

Rhaesus serricollis (Motschulsky, 1838)

Iran, Fars: Kazeron, VII.2000, H. Alemansoor leg.

Mesoprionus persicus (Redtenbacher, 1850)

Iran: Fars: Kazeron, VII.2000; VI, VII.2001; V.2002, leg. H. Alemansoor; Firooz Abad, V, VI.2000; VI.2001, leg. M. Fallahzadeh; Abadeh, VII, VIII.2001, leg. H. Alemansoor; Sepidan. VI.2000, leg. M. Fallahzadeh.

Pogonarthron minutum (Pic, 1905)

Iran, Fars: Jahrom, IV.2000; V.2002, leg. M. Fallahzadeh; Shiraz, VIII.2000; IX.2002, leg. M. Fallahzadeh; Fasa, VI.2000, leg. H. Alemansoor; Darab, IV.2001, leg. H. Alemansoor; Firooz Abad, VI.2001, leg. H. Alemansoor.

Apatophysis modica Gahan, 1906

Iran, Fars: Jahrom, V.1999; VII.2000, leg. M. Fallahzadeh.

Apatophysis farsicola n. sp.

Type series. Holotype ♂: Iran, Fars: Shiraz, VIII.2001, leg. M. Fallahzadeh; paratypes, 3 ♂♂: SW Iran, Büyer Ahmad-o-Kühgiluye, Sisaht, 32 km NW Yasug, 23.VII.2004, leg. M. Formanek, S. Kadlec, M. Rejzek, Holotype in coll. G. Sama; paratypes in coll. M. Formanek, S. Kadlec, M. Rejzek.

Description of the holotype. Length 12 mm, width 4,5 mm at shoulders. Integument light brown, covered with sparse, short recumbent grey pubescence; head and pronotum with scattered erect setae. Eyes large, deeply emarginate, extending on the ventral surface of the head, coarsely faceted; palpi short, last segment of maxillary palpi moderately wide, impressed above, about as long as the two preceding united. Pronotum, densely, shallowly punctate, with a feeble obtuse tubercle at each side and some feebly raised tubercles on the disc. Elytra sparsely and very finely punctate, punctures becoming evanescent from the middle and totally absent on the apical third, elytral apex attenuate. Antennae robust, slightly longer than the body, third segment shorter than the first, the fourth longer than both the first and the third, the fifth distinctly longer than the fourth, slightly longer than the sixth and slightly shorter than the seventh; all segments, the two first excepted, very densely clothed with appressed grey pubescence and, the eleventh excepted, compressed and angulate to the outer apical edge; last segment feebly appendiculate. Legs elongate, femora moderately compressed, front tibiae moderately curved, intermediate and hind tibiae straight, densely clothed with short white pubescence on the front side; first segment of

hind tarsi about as long as the second and third united, the third cleft to about one third of its length, onychium about as long as the second and third segments of tarsi together. Ventral surface of the body clothed with sparse appressed pubescence; front coxae prominent, prosternal process very narrow, feebly dilated behind; front coxal cavities angulate externally, open posteriorly; mesosternal process wider than the prosternal one, bilobed apically.

Discussion. Two species of *Apatophysis* Chevrolat, 1860 are known to occur in Iran; the male of the new species is easily recognizable from the male of both of them. *A. modica* Gahan, 1806, which occurs in southern Iran sympatrically with the new species, has antennae distinctly more slender and conspicuously longer (exceeding the body length by three segments); tarsi very long and conspicuously slender, with the lobes of the last segment spined apically; eyes larger with upper lobes closer to each other on the vertex; last segment of maxillary and labial palpi very elongate, cylindrical. *A. caspica* Semenov, 1901, occurring on the Caspian Sea in northern Iran (as well as *A. anatolica* Heyrovsky, 1938 from Turkey), has longer antennae (exceeding the body length by last two segments) different length ratio of antennal segments: fourth segment slightly shorter than first, about as long as third, fifth about as long as third and fourth combined; tarsi much longer. The new species differs from *A. mongolica* Semenov, 1901, *A. pavlovskyii* Plavilstshikov, 1954 and *A. kashmiriana* Semenov, 1901 by abdominal sternites sparsely, finely pubescent.

All known specimens of the new species were attracted to light traps.

Jebusaea hammerschmidti Reiche, 1877

Iran, Fars: Firooz Abad, VII.2003, M. Fallahzadeh; Jahrom, V.2000, leg. M. Fallahzadeh.

Trichoferus fissitarsis n.sp. (Fig.1)

Trichoferus preissi: Villiers, 1967: 353 (misidentification).

Hesperophanes preissi: Khiri, 1974: 28 (misidentification).

Type series. Holotypus ♀: Iran, Fars Province: Jahrom, IV.2002, leg. Majid Fallahzadeh; paratypes: 1 ♀, idem, VIII.2001; 2 ♀♀: Iran, Fars Province: Darab, V.1999, Hassan Alemansoor legt.; 1 ♀: Iran, Fars Province: Fasa, V.1999, Hassan Alemansoor legt.; Iran, Fars Province: Sepidan, VII.1998, Majid Fallahzadeh lgt.; 1 ♀: Iran, Fars Province: Kazeran, IX.2001, Hassan Alemansoor legt.; 1 ♀: "Iran" [without locality] (MNHNP); 1 ♀ labelled as follows: "Iran, Belutschistan, Sangun, 1650m: östl. Kuh i Taftan, 4-18.VI.1954, W.Richter leg." [bleu, printed]; "Trichoferus / preissi Heyd. / det. dr. L.Heyrovsky"; " S.Breuning det., 1956 / Hesperophanes / preissi Heyd." (MNS); 1 ♀: Iraq, Bagdad 1913 / Mattanovich (CPS); 1 ♀: "Bagdad / 1903"; "H. preissi / Heyd." [both handwritten by Pic]; "Museum Paris / Coll. M.Pic" [prin-



Fig. 1 - *Trichoferus fissitarsis* n.sp.: Holotype.

ted] (MNHN); 1 ♀: "Iraq Forest Insect Survey /IR 1058" [white, printed]; "Gusaiba / 12.5.73 / light trap / F.Ma'arof coll." [white, handwritten]; "Hesperophanes / preissi Heyd. / det. E.A.J.Duffy, 1974" [white, handwritten] (BMNH); 1 ♀: "W.Iraq / Rutbah. / 14.V.1934 / Henry Field." [white, printed]; "Hesperophanes / preissi Heyd. / det. K.G. Blair." [white, handwritten] (BMNH).

Male unknown.

Holotype and three paratypes in coll. G. Sama; paratypes in collection of Plant Protection Department, Jahrom Islamic Azad University (Fars, Iran); Muséum National d'Histoire Naturelle (Paris, France) (MNHN); Museum für Naturkunde, Stuttgart (Germany) (MNS); British Museum of Natural History (London, England) (BMNH).

Description of the holotype. Length 24 mm, width 8 mm at shoulders. Integument uniformly dark brown. Form large, robust. Head and pronotum strongly and coarsely punctate and covered with sparse golden recumbent pubescence and sparse long erect setae; pronotum globose, regularly rounded at sides, with a small impunctate, elongate shining area at middle of the base. Elytra densely punctate at base, punctures becoming shallower toward the apex; sparsely clothed with semi erect hairs and scattered stronger long erect golden hairs intermixed. Ventral surface of the body with metasternum nearly impunctate (only with a shallow microsculpture), metepisterna and abdominal sternites sparsely, shallowly punctate. Antennae short, not reaching to the middle of elytra, segments first to fifth subcylindrical, sparsely clothed with recumbent pubescence, the following ones distinctly flattened, very densely covered with short appressed pubescence; segments first to seventh sparsely ciliate beneath, the following ones only with 3-4 long hairs at the apex. Legs covered with sparse recumbent hairs and longer brown erect hairs. First segment of tarsi as long as the following two united, third segment bilobed to about three-quarter of its length; all segments with a wide smooth, longitudinal furrow on ventral side.

Variability of the paratypes. Length varies from 15 to 24 mm, elytra have sometimes somewhat denser recumbent pubescence and more numerous erect hairs, four paratypes (three of them from Iraq) are lighter in colour, three paratypes (two of them from Iraq) have antennae somewhat longer, barely surpassing the mid-elytra. All paratypes from Iraq have metasternum and abdomen more distinctly punctate.

Discussion. *Trichoferus fissitarsis* n.sp. is extremely similar to *T. preissi* Heyden, 1894, described from Mardin in southern Turkey; the latter differs from the new species chiefly by the ventral side of pro- and mesotarsi covered with a dense sole of pubescence, not furrowed longitudinally; the first segment of protarsi is in general shorter, not as long as the second and third segments united. Metasternum, in *T. preissi*, is densely, deeply punctate as well as metepisterna.

The type series consists entirely of female specimens; likely the male will exhibit differences in the shape of sclerites of the internal sac, very distinctive in *T. preissi*, these further characters will enable *T. preissi* to be distinguished from the new species and clarify the true relationship between the Iranian and Iraqi populations of *T. fissitarsis* n.sp.

T. preissi is currently recorded from southern Turkey and it is known to develop in living suckers and stems (occasionally in stumps) of *Ficus carica*. *T. fissitarsis* n.sp. is known from a wide area including the southern Iran (provinces of Fars and Sistan va Baluchistan) and the central Iraq. All known specimens are females and, as far as we know, all of them have been collected at light sources. The absence of males specimens is curious and cannot be explained; parthenogenesis is rather unusual in Cerambycidae and unknown in Hesperophanini, negative phototropism is unknown in *Trichoferus* and, anyway, it appears unlikely that only males are subject to it. We are lead to assume that the absence of males is due to chance.

The new species has been recorded by PIC (1907) "Je possède, venant de Bagdad, où il a été recueilli par Mr. Drure, un *Hesperophanes* qui peut être rapporté à la même espèce [*Hesperophanes preissi*], bien que différant un peu, notamment pour la ponctuation moins serrée du prothorax, ainsi que pour la coloration moins foncée, c'est à dire roussâtre du corps. ".

Specimens from Shiraz and Bampur, belonging to the Plant Pest and Diseases Research Institute of Evine (Teheran), recorded by VILLIERS (1967), as well as the one from Iraq recorded and depicted by KHIRI (1974), which we could not study, certainly belong to the new species.

Trichoferus campestris (Faldermann, 1835)

Described from "China borealis", it is widely distributed from Japan and Russian Far East throughout Central Asia as far as Transcaucasia, Caucasus and Eastern part of European Russia. Extremely polyphagous, it has been introduced with timber into several countries in the world, including France (Cocquempot, pers. comm.).

Some specimens have been recently found in northern Iran where it appears to be established (to our knowledge a new species for Iran). Gilan: Bandar e Anzali (sea-shore), V.2001, young larvae observed in subcortical galleries in a pole of *Alnus* sp., one adult emerged 6.VII.2002, leg. G. Sama; Mazandaran: Nastarud, sea-shore, 8.VI.2001, two adults in pupal cell and several fresh emergence holes in a dry branch of *Populus* (?), leg. G. Sama; Now Sar, 2.VI.2003, some adults attracted to the light of an hotel, leg. I. Rapuzzi and G. Sama (GS, CPR).

Trichoferus fasciculatus (Faldermann, 1837)

Described from "Transcaucasia", widely distributed westwards to the Canary Islands. It is a new record from Iran.

Gilan: Galugah (Bandar Pahlavi), 4.VII.73, A. Senglet (MHNG); Gilan: Bandar e Anzali (sea-shore), V.2001, ex larva from *Alnus* sp., adults hatched 6 and 20.VII.2002 (!); Mazandaran: Now Sar, 2.VI.2003, at light, I.Rapuzzi lgt. (CPR)

Stromatium unicolor (Olivier, 1795)

Iran, Fars: Shiraz, VI.1998, leg. M. Fallahzadeh; Darab, V.1998, leg. H. Alemansoor; Jahrom, V.2001, leg. M. Fallahzadeh.

Xenopachys mathiesseni (Reitter, 1908)

Iran, Fars: Sepidan, VII.1998, leg. H. Alemansoor; idem, V.1999, leg. M. Fallahzadeh; Kazerun, VI.1999, leg. H. Alemansoor; Firooz Abad, V.2000, leg. M. Fallahzadeh.

Cerambyx welensii (Küster, 1846),

Iran, Fars: Firooz Abad, VII.2000, leg. H. Alemansoor.

Derolus brevicornis Holzschuh, 1981

Iran, Fars: Jahrom, IV.2000, leg. M. Fallahzadeh.

Derolus iranensis Pic, 1956

Iran, Fars: Jahrom, V.2001, leg. M. Fallahzadeh.

Diorthus cinereus (Fabricius, 1792)

Iran: Fars: Sepidan, VII.1998, leg. M. Fallahzadeh.

Certallum ebulinum (Linnaeus, 1767)

Iran, Fars: Sepidan, IV.2000, leg. M. Fallahzadeh.

Aromia moschata ssp. *ambrosiaca* (Stevens, 1809)

Iran, Fars: Jahrom, IV.2001, leg. M. Fallahzadeh; Fasa, VI.2002, leg. H. Alemansoor.

Osphranteria coerulescens Redtenbacher, 1850

Iran, Fars: Sepidan, VI.1998, leg. H. Alemansoor; idem, IV, VI, VIII.2000, leg. M. Fallahzadeh; Abadeh, VIII.2000, leg. H. Alemansoor.

Osphranteria suaveolens Redtenbacher, 1850

Iran, Fars: Sepidan, VII.2001, leg. M. Fallahzadeh.

Chlorophorus nivipictus (Kraatz, 1879)

Described from "Külek, cilicischen Taurus", recently recorded from the islands of Samos (Greece) (DAUBER, 2004) it is very likely widespread throughout the southern Turkey from the Ionian coast to the lake of Van (Sama, 1982, 1996). We know it also from north-western Syria: "near Akbes (Ikbis), VI-VII.98, leg. Werner & Lizler" (GS, CPR). It is a new record from Iran and Syria.

One male has been found in north eastern Iran: West Azerbaijan: 40 Km south of Oroumieh, 15.V.2002, leg. G.Sama, ex pupa in a dead trunk of *Salix* sp.; adult emerged 10.VI.2002 (GS).

Pedestredorcadion biforme (Kraatz, 1873)

Iran, Fars: Abadeh, VII.2000, leg. H. Alemansoor.

Pedestredorcadion hellmanni (Ganglbauer, 1883)

Iran, Fars: Abadeh, VII. 2000, leg. H. Alemansoor.

Morimus asper ssp. *verecundus* (Faldermann, 1836)

Iran, Fars: Sepidan, VI.2001, leg. M. Fallahzadeh.

Note - This subspecies is only recorded from northern Iran. We regard the possibility of this species occurring in southern Iran as unlikely.

Agapanthia coeruleipennis Frivaldszky, 1878

Iran, Fars: Jahrom, IX.1999, leg. M. Fallahzadeh; Shiraz, VI.1998, leg. M. Fallahzadeh

Agapanthia walteri Reitter, 1898

Iran, Umg. Shiraz, ca 1600m, 16.IV.1937, leg. Brandt (NHMB) ; Fars, 68 km NW of Shiraz, Dalin, 17.-18.V.2001, leg. S.Prepl (GS); Fars: Jahrom, V.1999, leg. M. Fallahzadeh.

Calamobius filum (Rossi, 1790)

Iran, Fars: Shiraz,V.2002, leg. S. Hesami.

Helladia iranica Villiers, 1960

Iran, Fars: Fasa,VI.2000, leg. H. Alemansoor.

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Remark

During a recent trip to Iran, after this paper was accepted for publication, G. Sama had the opportunity to study the insects deposited in the Hayk Mirzayans Insect Museum in Tehran and those, mostly collected by students, stored in the entomological collections of the Plant Protection Departments of the Islamic Azad University of Arak, Jahrom and Shiraz. Among the Cerambycidae, it was possible to identify several specimens belonging to both the new species described in this paper; some of them, listed below, are regarded as further paratypes. The description of the previously unknown male of *Trichoferus fissitarsis* n. sp. will be published in a future article.

Apatophysis farsicola n. sp.

2 ♂♂: Sepidan, light trap, 13.VIII.1995; 1 ♂: Sepidan, 17.VIII.1991; 1 ♂: Sepidan: Margoon, 13.VIII.1995 (coll. G. Sama); 4 ♂♂ labelled as follows: Iran, Fars: Debid, 2150m, 19.6.1986, leg. Mirz[ayans] & Hash[emi].; Iran, Kashan: Abyaneh, 2300m, 16/17.VI.1984, leg. Paz[uki] & Hash[emi].; Esfahan-Natanz: Abyaneh, 2150m, 6.6.1988, leg. Hash[emi] & Badii; Ghom: 8 km S. Fardu: Vesb., 2320m, 26-28.VII.1983, leg. Paz[uki] & Hash[emi] (coll. Hayk Mirzayans Insect Museum, Tehran).

Trichoferus fissitarsis n. sp.

2 ♂♂, 9 ♀♀: Iran, Fars, Jahrom, without exact locality labels, collected by students; 2 ♀♀: Iran, Kuzhestan: Shustar, VII.2003, leg. A. Jamsidi (coll. Plant Protection Department, Islamic Azad University of Jahrom and Shiraz, P. Rapuzzi and G. Sama). 3 ♀♀: Iran, Fars: Shiraz, 12.VIII.1949, leg. Mirzayans; Firouzabad, 29.V.1951, leg. Mirzayans; Sistan & Baluchestan: Bampur, 6.V.1950, leg. Sarkisian (coll. Hayk Mirzayans Insect Museum, Tehran, sub *T. preissi*, det. A. Villiers).